

# Tailored Training Approaches

**Army Need:** To develop training approaches that address critical individual differences in Soldiers' backgrounds and skills to make training more effective, meaningful, and efficient.



**Purpose:** To develop measurement procedures and training techniques that can be applied to tailoring training in Army courses.

## **Products:**

- Techniques for quickly assessing critical individual differences to address at the start of training and in the process of training
- Tailored training approaches for different skills – cognitive and hands-on.
- Guidelines for implementing tailored training approaches

## **Payoff:**

- More effective training.
- Provides foundation for the TRADOC's Army Learning Concept 2015.

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**Collaboration/coordination:** TRADOC, USAMU, MCOE-DOTD, Infantry ALC, Engineer School, 198<sup>th</sup> Inf Bde



# Tailored Training

- Review of effective tailored training methods
  - Microadaptation
  - Human tutoring
  - Intelligent tutoring systems
  - Self-paced and accelerated learning
  - Learning in small groups
  - Aptitude by treatment interaction
- Best practices used by Army to tailor training (51 courses)
  - Little evidence of tailoring found: no pre-testing for experience or splitting on ability/knowledge, some human tutoring, microadaptation
  - Identified course conditions where tailoring most feasible
    - Early and frequent testing
    - Formation of small groups
    - Availability of supplemental materials
    - Mastery required for graduation
    - Graduation emphasis
- Measuring Differences in Soldier Knowledge, Skills, and Experience
  - Follow-on effort to identify best predictors on which to base tailored training
  - Prior knowledge as related to mental ability and experience
  - Engineer CCC (defensive operations) predictor skill set derived from course criteria
- Backwards Fading
  - From lit review, best tailoring approach for select Army tasks
  - Sequential, cumulative, single correct answer - previous research used engineering, algebra problems
  - Candidate tasks include troubleshooting equipment malfunctions, use of



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- Tailored Marksmanship Training in the Squad Designated Marksmanship Course
  - Tailored training experiment to compare AMU instructors developed tailored approaches
  - Also, examining predictors of marksmanship performance from TADSS performance
- Tailored Training Techniques for Raven SUAS Training
  - Developing Raven operator performance metrics
  - Identifying systematic Raven performance weaknesses amenable to tailored training
  - Plans to transfer metrics and instructional techniques to Raven Master Trainer course
- JRTC Actions on Contact
  - Latest project of DCOG sponsored Warrior Leadership Council; Terrain analysis next
  - Good success with product transition